

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A communication system comprising:
a transmitter for generating a signal, said transmitter having a mapping unit for mapping an input bit stream to a complex number domain, a cyclic converter unit coupled to the mapping unit for generating a partial response signal, wherein the transmitter suppresses a plurality of sub-symbols of the partial response signal to produce a truncated signal, and said transmitter having a prefix unit for appending a cyclic prefix for a leading edge of the truncated signal, the truncated signal to which the cyclic prefix is appended, used to modulate a carrier signal to generate the signal; and
a receiver in communication with the transmitter through a noisy channel for receiving a noisy signal, wherein the receiver recovers the signal from the noisy signal by eliminating noise resulting from transmission through the noisy channel.
2. (Cancelled)
3. (Currently Amended) The system of claim 1, further comprising a transform unit for converting the partial response signal to a time domain signal and suppressing the plurality of sub-symbols.
4. (Currently Amended) The system of claim 1, wherein the receiver comprises a detector unit for recovering the signal from the noisy signal.
5. (Currently Amended) The system of claim 1, wherein the suppressed plurality of sub-symbols are distributed evenly at the edges of the partial response signal.
6. (Original) A method for increasing bit-rate through effective bandwidth gain in a system utilizing an orthogonal frequency division multiplexing technique, the method comprising:

selecting a cyclic convolver having predefined values;

applying the cyclic convolver to a signal having a plurality of sub-symbols to produce a partial response signal having the plurality of sub-symbols, wherein the values of the cyclic convolver are selected such that a portion of the plurality of sub-symbols of the partial response signal are reduced to near zero amplitude;

dropping the portion of the plurality of sub-symbols with near zero amplitude from the partial response signal to produce a truncated partial response signal; and

appending a cyclic prefix at a leading edge of the truncated partial response signal.

7. (Currently Amended) The method of claim 6, further comprising:
transforming the partial response signal using an inverse fast Fourier transformation technique to produce a time based signal through a noisy signal; and
recovering the time based signal from the noisy signal at a receiver.

8. (Currently Amended) A system for delivering information from a source to a destination, the system comprising:
means for converting the information to a frequency domain signal;
means for transforming the frequency domain signal to a time domain signal,
wherein the means for transforming is coupled to the means for converting and wherein the transformation results in a plurality of sub-symbols having near zero amplitude; and
means for dropping the plurality of sub-symbols having near zero amplitude to produce a truncated time domain signal, wherein the means for dropping is coupled to the means for transforming.

9. (Currently Amended) The system of claim 8, further comprising:
means for delivering the truncated time domain signal from the source to the destination, wherein the means for delivering is coupled to the means for dropping; and

means for receiving the delivered truncated time domain signal, wherein the means for receiving is coupled to the means for delivering and wherein the means for receiving comprises:

means for recovering a received truncated time domain signal from the delivered truncated time domain signal, wherein the received truncated time domain signal represents the truncated time domain signal; and

means for transforming indications of the received time domain signal to a received frequency domain signal, wherein the means for transforming the indications of the received time domain signal is coupled to the means for recovering and wherein the received frequency domain signal represents the frequency domain signal.

10. (Original) The system of claim 9, further comprising means for recovering a received information from the received frequency domain signal, wherein the means for recovering is coupled to the means for transforming the received time domain signal and wherein the received information represents the information.

11. (New) Apparatus for a transmitter operable to generate a signal for communication upon a noisy channel, said apparatus comprising:
a mapping unit for mapping an input bit stream to a complex number domain;
a cyclic converter unit coupled to the mapping unit for generating a partial response signal, a plurality of sub-symbols of the partial response signal suppressed to produce a truncated signal; and
a prefix unit for appending a cyclic prefix for a leading edge of the truncated signal, the truncated signal to which the cyclic prefix is appended used to modulate a carrier signal to generate the signal for communication upon the noisy channel.